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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/049,760

05/01/2002

Oren Kramer

27986-713

7597

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08/23/2004

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650 PAGE MILL ROAD
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EXAMINER

PRIZIO JR, PETER

ART UNIT

PAPER NUMBER

2674

10

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,760

Applicant(s)

KRAMER, OREN

Examiner

Peter Prizio

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 28 May 2004.

Claim Objections

2. Claims 1 – 8 pending.
3. Claims 1 – 8 rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 – 4 and 6 – 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,576,981 to Parker et al (Parker) in view of US Patent 5,865,546 to Ganthier et al. (Ganthier).

6. Regarding claim 1, Parker teaches a system with removable, interchangeable keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that “those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication... as to which keypad is coupled... may be

provided" (column 4, lines 45+), but fails to provide details as to the construction of the keypad.

7. However, Ganthier (Fig. 1) teaches a keyboard (100) for use as an input device for a host computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific software application to be executed on said host computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5). Ganthier further teaches a keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection (105), and a second data connection (125).

8. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a computer system.

9. Regarding claim 2, Ganthier (Figs.1 & 2), as applied to claim 1 above, further teaches a keyboard (100) wherein said reader, said first data connection means, and said storage device are replaced by a mechanical member extending out of the removable part (135) for applying a mechanical force. Whenever said removable (130) part is placed into said fixed part (102), said mechanical force causing ID data related to a specific set to be transmitted to said host computer (Fig. 4, 200) via said second data

connection means (125), after a predetermined period has been lapsed (column 6, lines 13 – 24).

10. Regarding claim 3, Ganthier, as applied to claim 1 above, further teaches a keyboard (100) wherein said removable part is a single rigid unit (130).

11. Regarding claim 4, Ganthier, as applied to claim 1 above, further teaches a keyboard (100) wherein said ID is embedded into said identification mechanism (column 6, lines 2 – 7).

12. Regarding claim 6, Parker teaches a system with removable, interchangeable keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that “those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication...as to which keypad is coupled...may be provided” (column 4, lines 45+), but fails to provide details as to the construction of the keypad.

13. However, Ganthier (Fig. 1) teaches a keyboard (100) for use as an input device for a host computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific software application to be executed on said host computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5). Ganthier further teaches a keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection

(105), and a second data connection (125). Ganthier also teaches a software component (99) for reading said ID and executing one or more programs or predefined operations or applications (column 5, line 66 – column 6, line 24) residing on said host computer (200).

14. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a computer system.

15. Regarding claim 7, Ganthier, as applied to claim 6 above, further teaches a keyboard (100) wherein said predefined operations are directed to setup said host (column 6, lines 17 – 20).

16. Regarding claim 8, Parker teaches a system with removable, interchangeable keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that “those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication...as to which keypad is coupled...may be provided” (column 4, lines 45+), but fails to provide details as to the construction of the keypad.

17. However, Ganthier (Fig. 1) teaches a keyboard (100) for use as an input device for a host computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific software

application to be executed on said host computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5). Ganthier further teaches a keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection (105), and a second data connection (125). Ganthier also teaches a software component (99) for reading said ID and executing one or more programs, predefined operations or applications (column 5, line 66 – column 6, line 24) residing on said host computer (200). Further still, Ganthier teaches connecting between said removable part (130) and said fixed part (102) by contact upon placing said removable part on said fixed part (column 4, lines 24 – 29), reading said ID by said reader device (column 6, lines 14 – 16), conveying said ID from said keyboard to said host computer (column 5, lines 53 – 55) via said connection (125), and executing one of more programs, applications, or predefined operations being associated with said ID (column 6, lines 15 – 24).

18. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a computer system.

19. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Ganthier as applied to claim 1 above, and further in view of US Patent 5,150,118 to Finkle.

20. Regarding claim 5, Ganthier, as applied to claim 1 above, further teaches a keyboard (100) wherein the keys layout is compatible with a standard 101-keys keyboard (column 3, lines 57 – 60), but Parker in view of Ganthier fails to teach each key interacts with a contact in a one-to-one correspondence.

21. However, Finkle teaches a similar device as Parker where each key in the particular keypad actuates a contact in a one-to one correspondence (Fig. 1) where each key will actuate each contact 14 or 16 in a non-electrical means (column 3, lines 1 – 6).

22. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad assembly as taught by Parker in view of Ganthier with the keypad using individual keys corresponding with contacts in a one-to-one pattern for the benefit of greater flexibility to design key panels (column 4, lines 223 – 31)

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patents are included to further show the state of the art of interchangeable keyboards:

US Patent 6,317,061

US Patent 4,527,250

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Response to Arguments

25. Applicant's arguments filed 28 May 2004 have been fully considered but they are not persuasive.
26. The objection to the specification has been withdrawn in view of the amendments.
27. The objection to the drawings has been withdrawn in view of the amendments.
28. The rejection to claims 9 – 11 under 35 USC 112 second paragraph has been withdrawn in view of the amendments.

29. In view of the new grounds of rejection as necessitated by the amendment the applicant's arguments that Gauthier operates differently than the present invention have already been addressed.

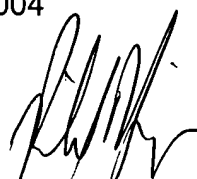
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Prizio whose telephone number is (703) 305-5712. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Prizio
Examiner
Art Unit 2674
August 20, 2004

Prizio



RICHARD HJERPE 8/20/04
SUPERVISORY PATENT EXAMINER
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